

Appendix E

Configuring RAS to Output PlotWorks Job Files

This appendix provides step-by-step instructions on configuring your workstation to output files using Remote Access Services (RAS) and Dial-Up Networking (DUN). The first section, *Install & Configure a Remote Access Server (Hub)*, details the installation and setup of the Print Server at the service bureau. The next two sections detail configuring RAS for Windows NT clients and DUN for Windows 95 clients.

PlotWorks Client users: These instructions use NetBEUI as the network protocol. However, your service bureau might require a different protocol. If so, instructions for installing other network protocols are given in *Installing Network Protocols (Windows NT)* and *Installing Network Protocols (Windows 95)*. Please check with your service bureau before beginning.



You must have Administrator permission to install or configure some of the necessary options.

Service Bureaus: These instructions use NetBEUI as the network protocol. If you prefer to use a different protocol, such as IPX/SPX or TCP/IP, for your RAS service please refer to *Installing Network Protocols (Windows NT)* and *Installing Network Protocols (Windows 95)*. Please provide the following information to the clients who will be submitting files by RAS or DUN to your Print Server:

- The print server's phone number
- The network protocol(s) installed on the print server
- The full UNC path to the network polling directory on the print server
- The RAS user account and password they are to use for dialing in to the print server



If the user account you are creating belongs to a Windows 95 client, the username must be the same as the user's Windows/Networking name.

Install & Configure a Remote Access Server (Hub)

This section provides you, the service bureau, with step-by-step instructions on how to configure the print hub, or server, to use RAS for receiving PlotWorks job files (.PLP) from your clients. Make notes as you go along so that you can provide your clients:

- The name and phone number of the print hub
- The network protocol used by the hub
- Dial in user name
- A password

The steps required in the installation and configuration of a RAS server are:

- Install/configure Remote Access Service
- Set up RAS user accounts
- Set up sharing on a local print queue directory

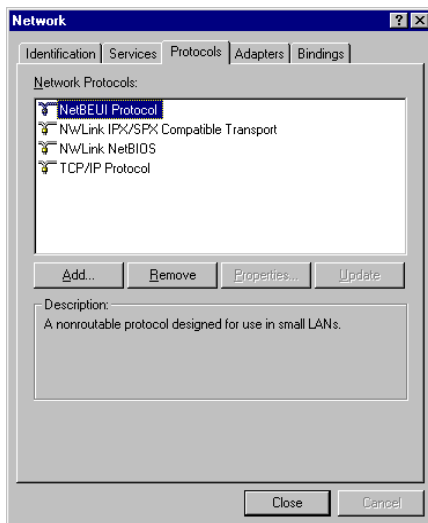


These instructions assume you have a working knowledge of Windows NT navigation and program installation. The steps below take you through installing and configuring Remote Access Service (RAS) using the NetBEUI network protocol. If you wish to use a different protocol, please refer to Installing Network Protocols (Windows NT) at the back of this appendix.

Verify Current Configuration

The first thing you should do is to make sure the required options are installed. All options can be verified within the Network dialog box, shown below.

*Fig. E.1
Windows
Network
dialog box*



To see if Remote Access Service, a modem, NetBEUI (or other) protocol, and the Loopback Adapter are installed:

1. Click the Windows **Start** button, click **Settings**, click **Control Panel**, and double-click **Network**. The Network dialog box displays.
2. Click the **Protocols** tab. Look to see if **NetBEUI** (or other protocol) is listed



***The network protocol must be installed first.** If there is not a network protocol installed, go to See “Installing Network Protocols (Windows NT)” on page G-18. and follow the instructions to install the appropriate network protocol.*

3. Click the **Services** tab. Look to see if **Remote Access Service** is listed.
If so, click **Remote Access Service** and click the **Properties** button to display the RAS Setup dialog box. If a modem is listed, click **Network** to verify what protocol is selected for the **Server Settings**. Click **Cancel** to close the Server Settings and click **Configure**. Verify that **Port Usage** is set to **Receive calls only** then click **Cancel** twice.



*If RAS is not installed, go to **Install RAS** below. The RAS installation process will automatically install the MS Loopback Adapter. You will then need to install NetBEUI, if it is not already installed. Go to “Installing Network Protocols (Windows NT)” on page G-18 for more information.*

4. Click the **Adapters** tab. Look to see if **MS Loopback Adapter** is listed.



If it is not listed, please go to “Installing the MS Loopback Adapter” on page G-24 and follow the installation instructions.

Install RAS

At different times during installation you might be asked to insert the Windows NT Installation disk(s) in your computer. Please have the Windows NT CD or Installation Disks ready.

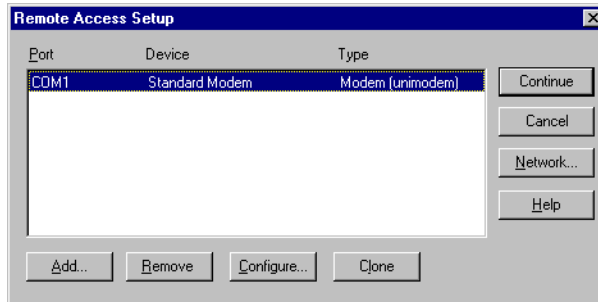


If you are currently on a Local Area Network (LAN), please contact your Network Administrator before proceeding. If an available option is not mentioned here, please accept the default setting.

To install Remote Access Service on your Windows NT 4.0-based computer:

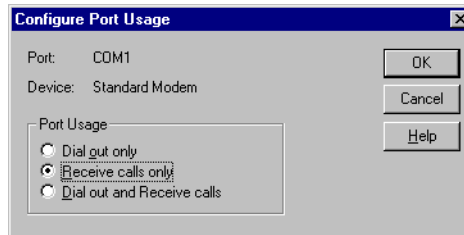
1. If not already viewing the Network dialog box, click the Windows **Start** button, click **Settings**, click **Control Panel**, and double-click **Network**. The Network dialog box displays (previous page).
 2. Click the **Services** tab.
 3. Click **Add** to and select **Remote Access Service** from the list of displayed services.
 4. Click **OK** and follow the screen prompts. You might also be prompted to insert the Windows NT 4.0 installation disk (CD or diskette).
The Remote Access Setup program copies some files and then prompts you to select a modem to be used for the RAS Device.
 5. In the list of RAS-capable devices, click the modem you have installed, and then click **OK**.
-

*Fig. E.2
The
Remote
Access
Setup
dialog box*



6. Click **Configure** to display the Configure Port Usage dialog box.

*Fig. E.3
Configure
Port
Usage
dialog box*

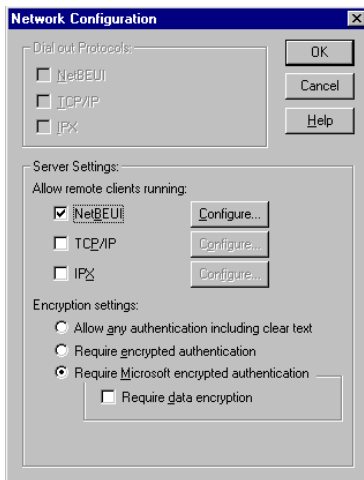


7. In the Port Usage box, click **Receive calls only**, and click **OK** to return to the Remote Access Setup dialog box.
8. Click **Network** to display the Network Configuration dialog box.



Any protocols that are currently installed will be selected by default. If you select a protocol that is not currently installed, it will automatically be installed with RAS.

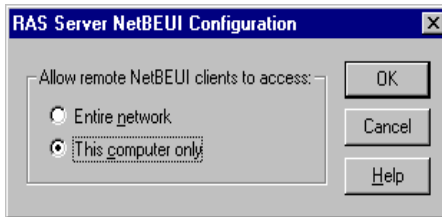
*Fig. E.4
Network
Config-
uration
dialog box*



If you select TCP/IP you might have to configure a Static Address Pool. See your network administrator or the Microsoft Windows documentation for assistance.

9. Click **NetBEUI** in the Server Settings box, and then click **Configure**. The RAS Server NetBEUI Configuration dialog box displays:

*Fig. E.5
RAS
Server
NetBEUI
Config-
uration
dialog box*



10. Click **This computer only** and click **OK**.
11. Click **Continue**. You might be prompted again for the Installation Disk. If using IPX/SPX, you might also be asked if you want to enable NetBIOS Broadcast Propagation. Click **Yes** to continue.
12. You might be asked to install the MS Loopback Adapter. If so, accept and go to "Installing the MS Loopback Adapter" on page G-24 for more information.
13. Click **Restart** when prompted to restart your computer and finish the installation.



***IMPORTANT NOTE:** If you have installed a Service Pack on your Windows NT-based computer, you must reapply the Service Pack after restarting your computer and before using RAS.*

Create User Accounts for Remote Access Service

The next step in setting up your RAS host (server) is to create a user account for each client that will be submitting files to your Print Hub.

To create a user account:

1. Click the Windows **Start** button, click **Programs**, click **Administrative Tools**, and then click **User Manager**.
2. Select **New User** from the **User** menu. The New User setup dialog box displays:

*Fig. E.6
New User
setup
dialog box*

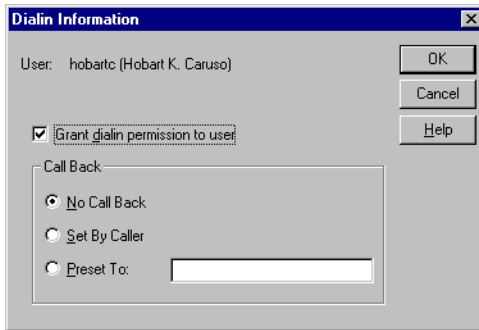
3. Enter a **Username**, **Password** and **Password confirmation**. Full Name and Description are optional.



If the user account you are creating belongs to a Windows 95 client, the username must be the same as the user's Windows/Networking name.

4. Deselect the box next to **User Must Change Password at Next Logon**, then select the check boxes next to **User Cannot Change Password** and **Password Never Expires** to select them.
 5. Click the **Dialin** button on the bottom of the dialog box. The Dialin Information dialog box displays.
-

*Fig. E.7
Dial-in
Inform-
ation
dialog box*



6. Click **Grant dialin permission to user** then click **OK**.
7. Click **OK** again.
8. Continue adding new user accounts or exit from the User Manager window.

Create Shared Folders

It is very important to set up a folder into which your clients will submit their .PLP print jobs. You can share your default Job Queue folder, or create a separate folder for each client and set Network Polling to watch the different folders.



This section assumes that you know how to create new folders using Windows NT Explorer.

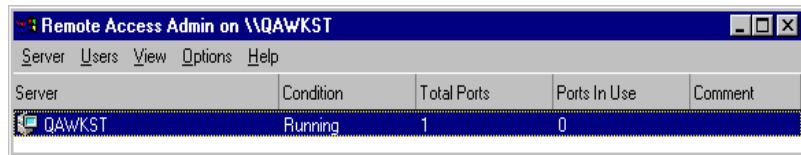
1. Open Windows NT Explorer, navigate to the local drive and create a New Folder (directory) called **Incoming**.
2. Create a subfolder (subdirectory) under Incoming and call it **Queue**.
3. Right-click on the **Incoming** folder and select **Properties** from the pop-up menu.
4. Click the **Sharing** tab and click **Shared As** to give sharing permissions to Incoming.
5. Click **OK** to save and exit.

Start the Remote Access Administrator

To start the Remote Access Server service:

1. Click **Start**, **Programs**, **Remote Access**, and click **Remote Access Admin**.
2. Click the **Server** menu and click **Start Remote Access Service**.
3. Click **OK**. The Remote Access Administrator displays the current RAS server and shows it **Running**.

Fig. E.8
Remote
Access
Adminis-
trator



That's all there is to setting up a RAS server to receive PlotWorks files from your clients. If you wish to install additional network protocols at this time, go to *Installing Network Protocols (Windows NT)*.

Making Remote Access Service Start Automatically

It is a good idea to configure the Remote Access Administrator to start automatically each time the computer is restarted.

To do so:

1. Click the Windows **Start** button, select **Settings** and select **Control Panel**.
2. Double-click the **Services** icon to display the Services dialog box.
3. Click **Remote Access Administrator** then click the **Startup** button.
4. Under **Startup Type**, click **Automatic** then click **OK**.
5. Click **Close**.

Now, whenever the server is restarted, RAS starts automatically and is ready to receive incoming files without any further user intervention.

Stopping the Remote Access Admin

To stop the RAS service:



The RAS server will not receive incoming jobs if the RAS Admin is turned off.

1. From the Admin screen (shown above), click the **Server** menu and click **Stop Remote Access Service**. The Remote Access Administrator displays the current condition as **Stopped**.
2. Select **Exit** from the **Server** menu to close the Admin window.

Set Up the Client's Dial-Up Networking Connection

This section provides you with step-by-step instructions on how to configure your Windows NT workstation to use RAS for sending PlotWorks job files (.PLP) to your service bureau.

The steps required in the setting up a RAS connection are:

- Install and configure Dial-Up Networking/Remote Access Service
- Install and configure a network protocol



These instructions assume you have a working knowledge of Windows NT navigation and program installation. The steps below take you through installing and configuring Remote Access Service (RAS) using the NetBEUI network protocol. If your service bureau uses a different protocol, please refer to Installing Network Protocols (Windows NT) for installation instructions.

Be Prepared

Before you can create a Dial-Up Networking connection to a remote server, you must get the following information from your service bureau:

- The remote server's phone number
- The network protocol(s) installed on the remote server (dial out protocol)
- The full UNC path to the network polling directory on the print server
- The RAS user account and password they have configured for you.

Verify Current Configuration

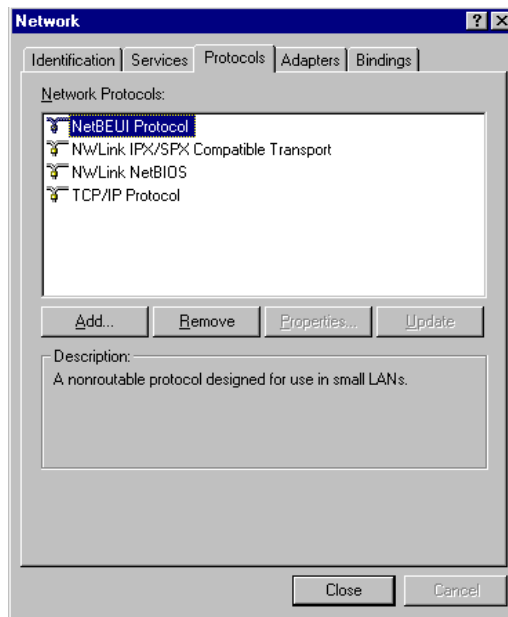
The first thing you should do is to verify that the required options are installed.

First, check to see if Dial-Up Networking is installed: Double-click the **My Computer** icon on your Windows NT desktop. Double-click **Dial-Up Networking**. If it has been installed you will see either a prompt that "The phone book is empty, press **OK** to add an entry," or you will see the Dial-Up Networking dialog box.

If it has not been installed, select **Install** to launch the DUN installation "wizard." See step 5 of *RAS Installation* below for more information.

All other required options can be verified by viewing the Network dialog box, shown below.

*Fig. E.9
Network
dialog box*



You must have Administrator permission to install or configure some of the necessary options.

To see if Remote Access Service is installed:

1. Click the Windows **Start** button, click **Settings**, click **Control Panel**, and double-click **Network**. The Network dialog box displays.
2. Click the **Services** tab. Look to see if Remote Access Service is listed. If it is not installed, see *RAS Installation* below.
3. Click the **Protocols** tab. Look to see if NetBEUI is listed.



If NetBEUI is not listed, you will need to install it. Go to “Installing Network Protocols (Windows NT)” on page G-18 for more information.

If all required options are present, continue with *Add a Dial-Up Networking Connection*, below.

Add a Dial-Up Networking Connection

To create a new Dial-Up Networking connection:

1. Double-click **My Computer** and double-click **Dial-Up Networking**.



*If you receive a notice that Dial-Up Networking is not installed, click **Install** and follow the prompts. When you are asked to create a new connection, proceed with Step 3.*

2. Click **New**.

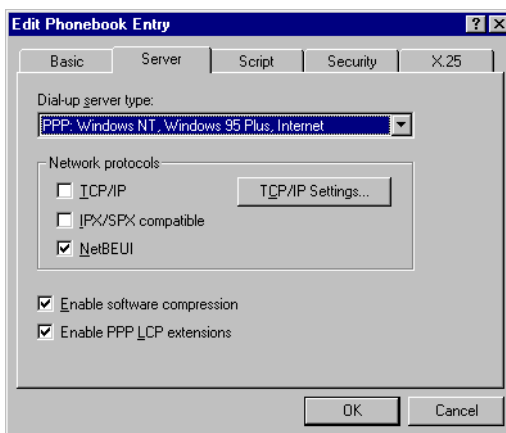


If you have not created a connection previously, the Make New Connection Wizard starts automatically. Follow the prompts.

If you have not installed a modem in Windows NT, the Install New Modem Wizard starts. Follow the prompts to install your modem.

3. Name the **Phonebook Entry** (Printing Service, for example) and click **Next**.
 4. Click **I am calling the Internet** and click **Next**.
 5. Enter the area code and telephone number for the connection, and select the appropriate country code for the remote server you are dialing.
 6. Click **Use Telephony dialing properties**, and then click **Next**. You might need to get this information from the service bureau.
 7. Click **Finish** to add the entry to the **Phonebook entry to dial** list.
 8. Click **More** and select **Edit entry and modem properties**. Click the **Server** tab to display the Dial-up Server properties. Make sure your settings are as shown below (if you are using NetBEUI). Refer to *Installing Network Protocols (Windows NT)* if you are using a different protocol.
-

*Fig. E.10
Dial-up
Server
properties*



9. Click **OK**. This connection is ready to test. Go to step 2 of *Make the Connection*, below.

Make the Connection



The following section assumes that you have installed and configured Dial-Up Networking and all other required options (protocol and RAS).

To connect to the RAS host (service bureau):

1. Double-click **Dial-Up Networking in My Computer**.
2. Select the Service Bureau phonebook entry and click **Dial**.
3. Enter the correct **password** (and domain, if required) and click **OK**.



If using TCP/IP, you will need an LMHOSTS file. See “Create an LMHOSTS File” on page G-25 before proceeding.

4. When the connection is made, click the Windows **Start** button, select **Run**, enter the UNC path to the shared folder on the host NT computer and click **OK**.
For example: \\RASHOST\INCOMING\QUEUE (where RASHOST will be the actual remote computer name).
5. If the connection has been made successfully, the host's \Incoming\Queue folder displays on your screen. You might be asked for your **Contact As** (username) and **Password**. If so, fill in the information and click **OK**.

6. Right-click on the **Dial-Up Monitor** icon (located near the clock on the Windows NT task bar) and select **Hang Up**, click on the name of the connection that is running, then click **Yes**.

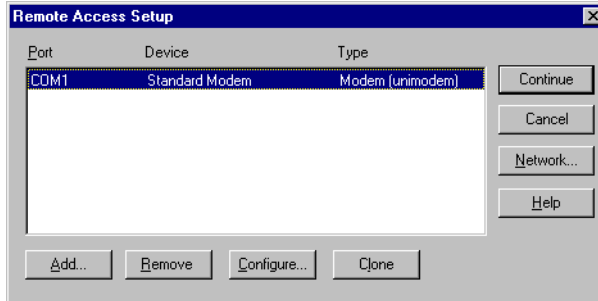
The connection is ready to transfer .PLP files. For more information on using the Job Editor to send job files, see “Output Job Tickets” on page G-28, or refer to the PlotWorks Client guide.

RAS Installation

To install Remote Access Service on your Windows NT workstation:

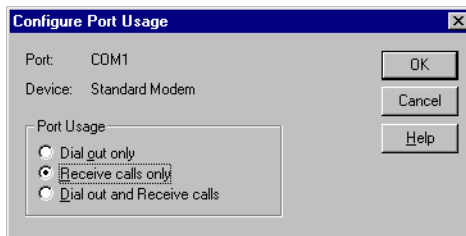
1. Click the Windows **Start** button, click **Settings**, click **Control Panel**, and double-click **Network** to display the Network dialog box.
2. Click the **Services** tab and click **Add**. A list of available services displays.
3. Click **Remote Access Service**.
4. Click **OK** and follow the prompts.
5. When prompted, select the modem to be used as a **RAS Device**, then click **OK**. The Remote Access Setup dialog box displays:

*Fig. E.11
Remote
Access
Setup
dialog box*



6. Click the **Configure** button. The Configure Port Usage dialog box displays:

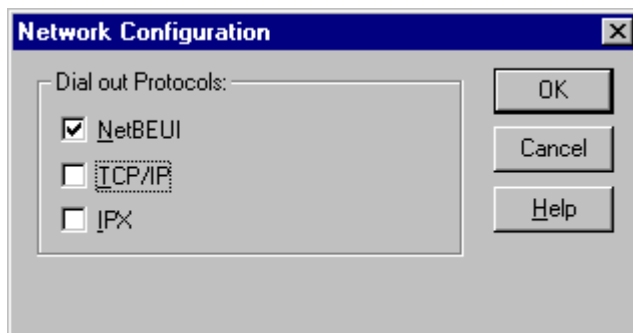
*Fig. E.12
Configure
Port
Usage
dialog box*



7. Select **Dial out only** and click **OK**.

8. Back at the Remote Access Setup dialog box, click the **Network** button.

*Fig. E.13
Network
Config-
uration
dialog box*



9. Select the correct **Dial out protocol** (get this from your service bureau) and click **OK**.
10. Click **Continue** and follow the screen prompts.
11. If the Network dialog box is still open, click **Close** and follow the screen prompts.

Set up the Client Dial-Up Networking Connection (Win95)

These instructions assume you have working knowledge of Windows 95 navigation and program installation. The steps below take you through installing and configuring Dial-Up Networking using the NetBEUI network protocol. If your Service Bureau uses a different protocol, please refer to “Installing Network Protocols (Win95)” on page G-24.



If the user account you are creating belongs to a Windows 95 client, the username must be the same as the user's Windows/Network logon username.

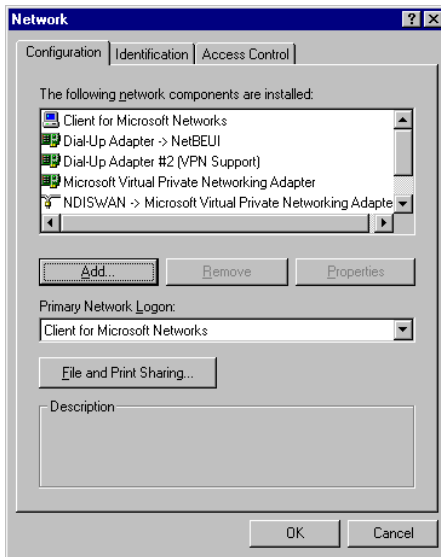
Verify Current Configuration

To check your current Network configuration:

1. Click the Windows **Start** button, click **Settings**, click **Control Panel**, and double-click **Network**. The Network dialog box displays.
 2. The following items should be listed in the Installed Components window:
 - Client for Microsoft Networks
 - Dial-Up Adapter
-

- A network protocol -- NetBEUI, for example

*Fig. E.14
Network
dialog box*



3. Double-click the **My Computer** icon on your Windows desktop to see if Dial-Up Networking is installed. The 1.3 upgrade is required for Windows 95-OSR2/OEM -- you can download this from Microsoft's web site at: www.microsoft.com/windows/getisdn/dload.htm.



*If any of these options is missing, click **Add** and follow the prompts. Go to "Installing Network Protocols (Win95)" on page G-24 for more information.*

4. If all required options are present, continue with *Add a Dial-Up Networking Connection*, below.

Add a Dial-Up Networking Connection

Before you can create a Dial-Up Networking connection to a remote server, you must get the following information from your service bureau:

- The remote server's phone number
- The network protocol(s) installed on the remote server
- The full UNC path to the network polling directory on the print server
- The RAS user account and password they have configured for you

To add a new connection:

1. Double-click **My Computer** (on your Windows desktop), then double-click **Dial-Up Networking**. If you have not created a connection previously, the *Make New Connection Wizard* starts automatically. Follow the prompts. If it has been used, go to step 2 to create a connection for your service bureau.



*If you do not see a **Dial-Up Networking** folder on **My Computer**, then it is not installed. Please go to **Installing Dial-Up Networking on Windows 95**, follow the instructions then finish this section.*



*If you have not installed a modem in Windows NT, the **Install New Modem Wizard** appears. Follow the prompts to install a modem.*

2. Double-click **Make New Connection**.
3. Enter a name for the computer to which you will be connecting (such as Printing Service).
4. Select a **modem** and click **Next**.
5. Enter the area code and telephone number for the connection, and select the appropriate country code for the remote server you are dialing and click **Next**.
6. Click **Finish** to add an icon for this connection to the Dial-Up Networking folder.
7. Right-click on the new Dial-Up connection and select **Properties** from the menu that pops up. Click the **Server Types** tab to display the Dial-up Server properties. Make sure your settings are as shown below. Refer to “Installing Network Protocols (Win95)” on page G-24 if you are using a different protocol.
 - Dial-Up Server Type: **PPP: Windows 95, Windows NT 3.5, Internet**
 - Advanced Options: Click **Log on to Network** and **Enable software compression**
 - Allowed Network Protocols: Click **NetBEUI** (for this example)
8. Click **OK**. This connection is ready to use. Go to step 2 below.

Make the Connection

The following instructions assume that you have installed and configured Dial-Up Networking and all required protocol(s).

To connect to the RAS host (service bureau):

1. Double-click **Dial-Up Networking** in **My Computer**.
2. Double-click your new Dial-up connection entry.



If using TCP/IP, you will need an LMHOSTS file. See “Create an LMHOSTS File” on page G-25 before proceeding.

3. When the connection is made, click the Windows **Start** button, select **Run**, enter the UNC path to the shared folder on the host NT computer and click **OK**.

For example: `\\RASHOST\INCOMING\QUEUE` (where *RASHOST* will be the actual host computer name)

4. If the connection has been made successfully, the host’s Incoming\Queue folder displays on your screen. You might be asked for your password again. If so, enter your password and click **OK**.
5. Right-click on the **Dial-Up Monitor** icon (located near the clock on the Windows 95 task bar) and select **Disconnect**.

The connection is ready to transfer job tickets. For more information on using the Job Editor to send job files, see “Output Job Tickets” on page G-28 or refer to the PlotWorks Client guide.

Installing Network Protocols (Windows NT)

This section provides the basic steps required to install a network protocol on a Windows NT Server or Workstation.

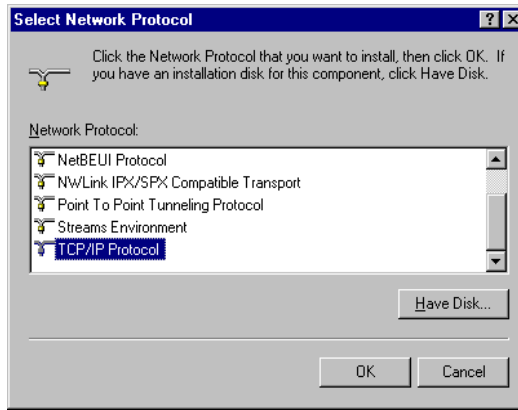
Install TCP/IP



If you are currently on a Local Area Network (LAN), contact your Network Administrator before proceeding. Administrative Privileges are required to install a network protocol on an NT server or workstation.

1. Open the **Control Panel** and double-click **Network**. The Network dialog box displays.
 2. Click the **Protocols** tab and click **Add**. The Select Network Protocol dialog box displays.
-

*Fig. E.15
Select
Network
Protocol
dialog box*



3. Select **TCP/IP** and click **OK**. A dialog box displays, asking if a DHCP server is present on the network (so it can dynamically assign the computer an IP address).
4. Do one of the following procedures to configure the IP address:
 - To have the DHCP server assign the IP address, click **Yes**. The Windows NT Setup dialog box displays. Follow the prompts to enter the following information:
 1. Type the path to the location of the Setup files on the Windows NT Server 4.0 CD-ROM.



*The Setup files are typically located at **x:\i386**, where 'x' is the letter of the CD-ROM drive.*

2. Click **Continue**. The Setup program copies the required files, and the TCP/IP Protocol appears in the Network Protocols list box.
3. Click **Close**. Windows NT Server 4.0 updates the network bindings, and you are prompted to restart the computer.



CAUTION: *To prevent data loss, save any open files and exit all open applications before proceeding.*

4. Click **Yes** to restart the computer and enable the new settings.
 - If the network does not have an existing DHCP server, or if the computer is to be used as a DHCP server, click **No** to manually configure the IP address. The Windows NT Setup dialog box appears. Follow the prompts to enter the following information:

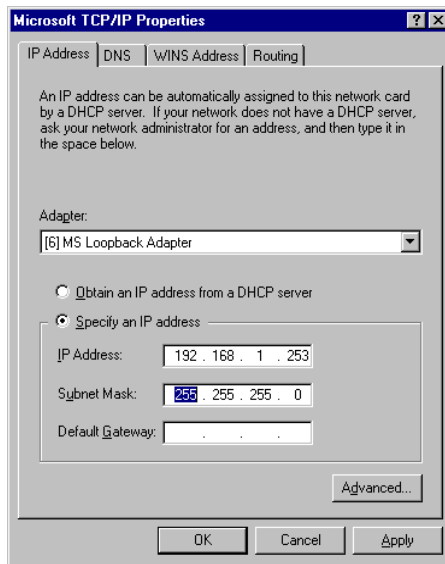
1. Type the path to the location of the Setup files on the Windows NT Server 4.0 CD-ROM.



The Setup files are typically located at x:\i386, where 'x' is the letter of the CD-ROM drive.

2. Click **Continue**. The Setup program copies the required files and the TCP/IP Protocol appears in the Network Protocols list box.
3. Click **Close**. Windows NT Server 4.0 updates the network bindings, and the TCP/IP Properties dialog box appears.

*Fig. E.16
TCP/IP
Properties
dialog box*



4. Select the desired network adapter from the **Adapter** drop-down list box (usually **MS Loopback Adapter**).
5. Click **Specify an IP address**, type the IP address for your computer, the subnet mask, and the default gateway in the appropriate boxes.
6. Click **OK**. Windows NT Server 4.0 updates the network bindings, and a dialog box prompts you to restart the computer to enable the new settings.



To prevent data loss, save any open files and exit all applications before proceeding.

7. Click **Yes** to restart the computer and enable the new settings.

Create an LMHOSTS File

If you are using TCP/IP to connect to a remote host (service bureau) that is not using a DHCP server, you must also create and use a text file called LMHOSTS. The LMHOSTS file contains the mappings of IP addresses to NT computer names (in this case, the service bureau's print server). If you will be sending to different print servers, each entry should be kept on a separate line. The IP address should be placed in the first column followed by the corresponding [computer name]. A tab should separate the address and the [computer name]. These are then followed by #PRE, which causes the entry to be preloaded into the name cache.



Contact the service bureau for the correct IP address and NT computer name. For more information, you can also refer to the LMHOSTS.SAV file located in the C:\WINNT\SYSTEM32\DRIVERS\ETC folder.

To create an LMHOSTS file:

1. Open the Windows Notepad accessory: Click the **Start** button, select **Programs**, then **Accessories**, then click **Notepad**.
 2. Type the IP address of the remote computer.
 3. Press **Tab** and type the remote computer's name (use upper-case).
 4. Press **Tab** and type **#PRE** (use upper-case). The Notepad screen should resemble:

```
192.168.1.253    RASHOST    #PRE
```
 5. Click **File** and **Save** to save the file as **LMHOSTS** (no extension) in the C:\Winnt\System32\Drivers\Etc folder. You might have to go to Windows Explorer to remove the .TXT extension from the file before using it.
 6. Click **File** and **Exit**.
 7. When you establish a dial-up connection to the host, go to an MS-DOS prompt (there is usually one on the Windows Program list).
 8. At the DOS prompt, type **NBTSTAT -R** and press **Enter**. You must use an upper-case **R**.
 9. Type **NBTSTAT -c** and press **Enter**. You must use a lower-case **c**.
 10. Type **Exit** to return to Windows. You can now continue from G-13, step 4 in *Make the Connection*.
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If **NBTSTAT** fails, check to see if the **LMHOSTS** file has an extension (like **.TXT**). If so, rename the file (from **LMHOSTS.TXT** to **LMHOSTS**, for example) and try again.

Install NWLink IPX/SPX Compatible Transport



If you are currently on a Local Area Network (LAN), contact your Network Administrator before proceeding. Administrative Privileges are required to install a network protocol on an NT server or workstation.

1. Open the **Network** dialog box from the Windows **Control Panel**.
2. Select the **Protocols** tab and click **Add**.
3. Select **NWLink IPX/SPX Compatible Transport** from the **Network Protocols** list box and click **OK**. A Windows NT Setup dialog box appears, prompting for the location of Windows NT setup files.
4. Enter the path to the location of the Setup files on the Windows NT Server 4.0 CD-ROM, if necessary.



The Setup files are typically located at **x:\i386**, where 'x' is the letter of the CD-ROM drive.

5. Click **OK**. **NWLink IPX/SPX Compatible Transport** and **NWLink NetBIOS** appear in the Network Protocols list box.
6. To complete NWLink IPX/SPX Compatible Transport installation, do one of the following:
 1. Accept the default configuration:
 - Click **Close**. The Bindings process starts and finishes, and the Network Settings Change dialog box appears.



CAUTION: Make sure to save all work and close all applications before proceeding to prevent data loss.

- Click **Yes** to restart the computer and enable the new settings.
 2. Manually configure NWLink IPX/SPX Compatible Transport:
-

- Double-click **NWLink IPX/SPX Compatible Transport** in the **Network Protocols** list box. The NWLink IPX/SPX Properties dialog box appears.
- Select the **General** tab. From the **Adapter** drop-down list, select the name of the network adapter card to which you want to bind the transport.
- Specify the appropriate frame type and network number in the **Frame Type** and **Network Number** drop-down list boxes.
- (Optional) Select the **Routing** tab and select **Enable RIP Routing**.



To enable RIP routing you must have more than one network adapter card running IPX/SPX and Routing Information Protocol (RIP) for NWLink must be installed under Network Services.

- Click **OK** then click **Close**. The binding process starts and finishes, and the Network Settings Change dialog box appears.



CAUTION: *Make sure to save all work and close all applications before proceeding to prevent data loss.*

- Click **Yes** to restart the computer and enable the new settings.

Installing NetBEUI Protocol



If you are currently on a Local Area Network (LAN), contact your Network Administrator before proceeding. Administrative Privileges are required to install a network protocol on an NT server or workstation.

1. Open the **Network** dialog box.
2. Click the **Protocols** tab and click **Add**. The Select Network Protocol dialog box appears.
3. Select **NetBEUI Protocol** from the Network Protocols list box and click **OK**. The Windows NT Setup dialog box displays. Follow the prompts.



*The Setup files are typically located at **x:\i386**, where 'x' is the letter of the CD-ROM drive.*

4. Click **Close**. The Bindings process starts and finishes, and the Network Settings Change dialog box displays.



CAUTION: *To prevent data loss, save all open files, and exit applications before proceeding.*

5. Click **Yes** to restart the computer and enable the new settings.

Installing the MS Loopback Adapter

The Microsoft Loopback Adapter is usually installed when you install certain network protocols. However, should you need to install it separately, this section details the installation.

1. Open the Network dialog box from the Windows **Control Panel**.
2. Select the **Adapters** tab and click **Add**.
3. Click **MS Loopback Adapter** and click **OK**.
4. Select **Frame Type** as **802.3**, click **OK** and follow the instructions on the screen.
5. If you are using TCP/IP, you might prompted to enter the TCP/IP Properties for the MS Loopback Adapter. For example:
 - Select the **MS Loopback Adapter**.
 - Click **Specify an IP address**.
 - For the IP Address type **192.168.1.253**.
 - For the Subnet Mask type **255.255.255.0**.
 - Click **OK**.
6. Click **Close** and follow the instructions on the screen.

Installing Network Protocols (Win95)

This section provides the basic steps required to install a network protocol on a Windows 95 workstation.

Installing TCP/IP

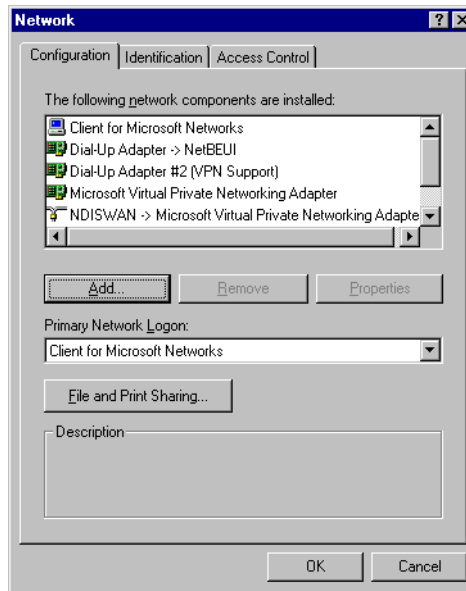


If you are currently on a Local Area Network (LAN), contact your Network Administrator before proceeding.

1. Open the **Control Panel** and double-click **Network**. The Network dialog box
-

displays.

*Fig. E.17
Network
dialog box*



2. From the **Configuration** tab, click **Add**.
3. Click **Protocol** and click **Add**.
4. Click the appropriate **Manufacturer** and **Network protocol** and click OK. In this case, you would select Microsoft as the manufacturer and TCP/IP as the network protocol. Click **OK**.
5. Click **OK**. You might be asked to insert the Windows 95 Installation CD (or diskette).
6. Click **Yes** when prompted to restart the computer and enable the new settings.

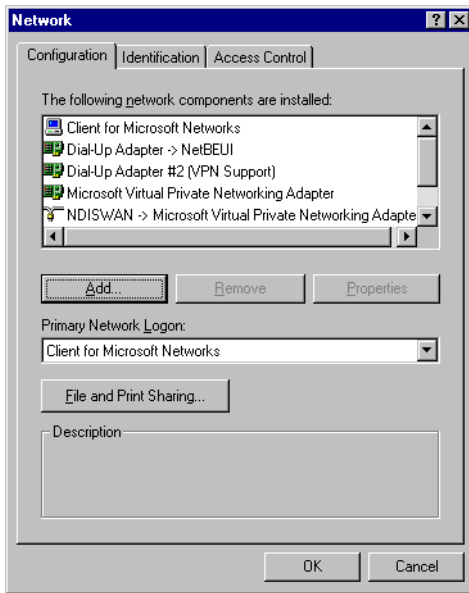
Installing IPX/SPX Compatible Protocol (Win95)



If you are currently on a Local Area Network (LAN), contact your Network Administrator before proceeding.

1. Open the **Control Panel** and double-click **Network**. The Network dialog box displays.

Fig. E.18
Network
dialog box



2. From the **Configuration** tab, click **Add**.
3. Click **Protocol** and click **Add**.
4. Select **Microsoft** as the **Manufacturer** and **IPX/SPX Compatible Protocol** as the **Network protocol** and click **OK**.
5. Click **OK**. You might be asked to insert the Windows 95 Installation CD (or diskette).
6. Click **Yes**, when prompted, to restart the computer and enable the new settings.

Installing NetBEUI Protocol



If you are currently on a Local Area Network (LAN), contact your Network Administrator before proceeding. Administrative Privileges are required to install a network protocol on a server or workstation.

1. Open the **Control Panel** and double-click **Network**. The Network dialog box displays.
2. From the **Configuration** tab, click **Add**.
3. Click **Protocol** and click **Add**.

4. Select **Microsoft** as the **Manufacturer** and **NetBEUI** as the **Network protocol** and click **OK**.
5. Click **OK**. You might be asked to insert the Windows 95 Installation CD (or diskette).
6. Click **Yes**, when prompted, to restart the computer and enable the new settings.

Installing Client for Microsoft Networks

1. Open the **Control Panel** and double-click **Network**. The Network dialog box displays.
2. Click **Add** and click **Client**.
3. Click the **Add** button, click **Microsoft**, select **Client for Microsoft Networks**, and then click **OK**.
4. Click **Client for Microsoft Networks** to select it, click the **Properties** button, click **Logon and restore network connections**, and then click **OK**.



Contact the Service Bureau Network Administrator to see if the Windows NT domain is necessary.

5. Click the **Identification** tab, fill out the **Computer name**, **Workgroup**, and **Computer Description**.
6. Click the **Access Control** tab and select **Share-Level** access control.
7. Click the **Configuration** tab and select **Client for Microsoft Networks** as the Primary Network Logon.
8. Click **OK** and follow the instructions on the screen.

Installing Dial-Up Networking on Win95

To install the Dial-Up Networking component:

1. Double-click **My Computer**.
If there is a Dial-Up Networking folder in My Computer, Dial-Up Networking is already installed. If there is no Dial-Up Networking folder, continue with these steps.
 2. In **Control Panel**, double-click the **Add/Remove Programs** icon.
 3. On the **Windows Setup** tab, click **Communications** in the Components box, and then click **Details**.
 4. Select the **Dial-Up Networking** check box, and then click **OK**.
-

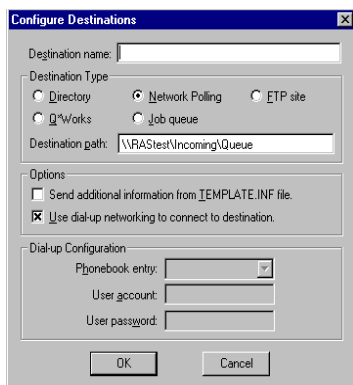
5. Click **OK** again.

Output Job Tickets

This section assumes that the PlotWorks Client is installed and that you can create and output job ticket.

1. Open the PlotWorks Client and create or open a job ticket.
2. Under the **Setup** menu, choose **Configure Destinations**. The following dialog box appears:

*Fig. E.19
Configure
Destination
dialog box*



3. Enter the name of the service bureau connection in the **Destination Name** field. This creates an entry under the Output menu.
4. In the **Destination Path** field, enter the UNC path of the shared folder to which the files will be sent.
5. Under **Options**, select **Use Dial-up Networking to Connect to Destination**.
6. In the **Dial-up Configuration** box, select the **Phonebook Entry** of the Service Bureau, enter your **User Account** (username) and **Password**, if required. The service bureau can provide this information.



Your user account name must be the same as your Windows/Network login username if you are using Windows 95.

7. Under **Destination Type**, select **Network Polling** (unless the service bureau specifies **Job Queue**).
8. Click **OK**.
9. Send the job by clicking **Output Job** and selecting the destination name entered in step 3.

10. Follow any on-screen prompts that appear. Your job is sent to the \\[RASHOST]\\INCOMING\\QUEUE folder on the host computer (where [RASHOST] is the actual host computer name).

Installing FTP

FTP has gained in popularity as a faster, more efficient means of file transfer than e-mail. It can handle larger files and uses the Internet as its means of connection between clients and hosts. FTP uses the connection-oriented services of TCP to transfer text and/or binary files between a local host running TCP/IP and a host configured with an FTP server program.

This section tells you how to install FTP on a Windows NT 4.0 server and on a Windows 95, 98, or NT client (workstation).

System Requirements:

In order to receive FTP files the Host Server must be configured with:

- Windows NT 4.0 or higher
- Remote Access Service
- TCP/IP
- FTP server daemon (included on the Windows NT diskettes/CD)
- A user account for the remote user

The client computer must be configured with:

- Windows NT 4.0, Windows 5 or Windows 98
- Dial-Up Networking
- TCP/IP
- FTP client software (included on your Windows NT, 95 or 98 CD/diskettes)
- A user account on the FTP server

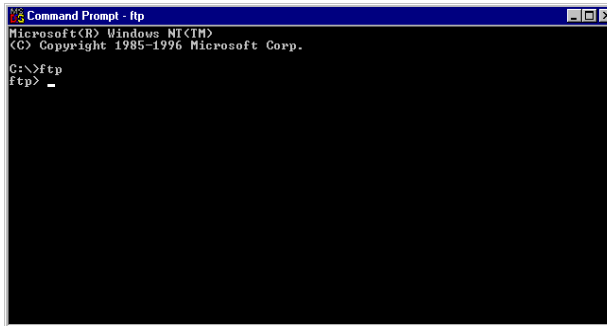


Unless otherwise changed, when Windows 95 is installed on your system TCP/IP is installed as your default Internet protocol. FTP is also installed as part of the TCP/IP service.

To verify if FTP is already installed:

1. From the command prompt (C:\) type **FTP** and press **Enter**.
 2. An FTP prompt appears (shown below). If you receive any other message, FTP is not yet installed. Proceed to “Installing Internet Information Server on an NT Server” on page G-30.
-

Fig. E.20
FTP
prompt



3. For a list of FTP commands, type **help** and press **Enter** at the FTP prompt. For further information type **help** and then the name of the command. This applies for both WIN95 and NT-based systems.

Installing Internet Information Server on an NT Server

You will need your Windows NT installation diskettes/CD.

1. Log on as Administrator
2. Check to see if TCP/IP is installed on your system
3. From the **Start** menu, go to **Settings** and then click on the **Control Panel**. The **Control Panel** window displays.
4. Double-click on the **Network** icon.
5. Click on the **Protocols** tab. Look to see if TCP/IP is installed. If it is not, see “Installing Network Protocols (Windows NT)” on page G-18.
6. Click **Cancel** to close the **Network** dialog box.
7. Insert the Windows NT 4.0 Server CD/diskette.
8. From the desktop, double-click the **Install Internet Information Server**.

If **Install Internet Information Server** is not found on your desktop:

- Click on the Windows **Start** menu, point to **Settings** and then click **Control Panel**.
- Double-click the **Network** icon.
- Click on the **Services** tab.
- Click **Add**. The **Select Network Service** dialog box displays.
- From the Select **Network Protocol** dialog box, select **Internet Information Server**. The Windows NT Setup box appears, requesting the full path of the desired file. For most systems this will be **D:\I386**.

- Click **Continue**. The **Install Internet Information Server** displays.
9. From the **Install from** dialog box, type **D:\I386**, in most cases, or type the appropriate path for the Windows NT 4.0 Server disk.
 10. The **Microsoft Internet Information Server 2.0 Setup** dialog box appears. The **Microsoft Internet Information Server 2.0 Setup** contains the following information:
 - Internet Service Manager
 - World Wide Web Service
 - WWW Service Samples
 - Internet Service Manager (HTML)
 - Gopher Service
 - FTP Service
 - ODBC Drivers and Administration
 11. Make sure that only **Internet Server Manager (HTML)** and **FTP Service** options are selected and click **OK**.
 12. When prompted to create the **C:\Winnt\System32\Inetsrv** directory, click on **Yes**. The Publishing Directories dialog box appears, listing the default directory:

FTP Publishing Directory	C:\inetpub\ftproot
--------------------------	--------------------
 13. Click **OK** to accept the default directory or create your own.
 14. When prompted to create the default directory, click **Yes**. Setup installs the **Internet Information Server** software.
 15. When setup is complete, click **OK**.
 16. Follow the prompts to restart your computer.
- When your computer has rebooted a new program will have been added to your **Start** menu.
17. From your **Start** menu, click **Programs** and then **Microsoft Internet Server (Common)**. The options available from within the application are: **Internet Information Server Setup**, **Internet Service Manager**, **Internet Service Manager (HTML)**, **Key Manager**, and **Product Documentation**.
Internet Service Manager is used in the administration of FTP and other Internet Services.
 18. If the Network dialog box is open, click **Close**.
-

Configuring Windows NT 4.0 Workstation for FTP

You will need a Windows NT 4.0 Workstation CD/diskette to accomplish the following.

1. Log on as Administrator.
2. Check to see if TCP/IP is installed on your system:
 - From the **Start** menu, go to **Settings** and then click **Control Panel**. The **Control Panel** window displays.
 - Double-click the **Network** icon.
 - Click on the **Protocols** tab. Look to see if **TCP/IP** is installed. If it is not, see “Installing Network Protocols (Windows NT)” on page G-18.
 - Close the Network dialog box by clicking **Cancel**.
3. Insert the Windows NT 4.0 Workstation CD/diskette.
4. From within the **Network** dialog box, select the **Services** tab. Click the **Add** button. From within the **Select Network Service** window, find and highlight **Microsoft Peer Web Server**.
5. The Internet Information Server Installation dialog box displays, prompting you for the path to additional files. These files are found on the Windows NT 4.0 Workstation CD. The default path for the files is usually **D:\i386**. Click **OK**. The desired files are loaded and the **Microsoft Peer Web Services Setup** box appears.

The **Microsoft Peer Web Services Setup** dialog box contains the following information:

- Internet Service Manager
 - World Wide Web Service
 - WWW Service Samples
 - Internet Service Manager (HTML)
 - Gopher Service
 - FTP Service
 - ODBC Drivers and Administration
6. Select **Internet Service Manager (HTML)** and **FTP Service** options, and click **OK**.

7. You are asked to create the install directory for the desired files. The default directory is **C:\Winnt\System32\Inetsrv** (or change this directory by selecting the **Change Directory** button and create your own).
8. Click **OK** to create the directory. The Publishing Directories dialog box appears, listing the default directory:
FTP Publishing Directory C:\Inetpub\ftproot
9. Click **OK** to accept the default directory or create your own.
10. When prompted to create the default directory, click **Yes**.
11. Setup installs the **Microsoft Peer Web Services** software.
12. When setup is complete, click **OK**. The new application is added to your Start menu.
13. From your **Start** menu, click **Programs** and then **Microsoft Peer Web Services (Common)**. From this program your choices are **Internet Service Manager**, **Key Manager**, **Peer Web Services Setup** and **Product Documentation**.
Internet Service Manager is used in the administration of FTP and other Internet Services.
14. If the Network dialog box is open, click **Close**.

To verify that FTP is now installed, refer to page G-29.

For instructions on configuring PlotWorks to output jobs using FTP, see “Output to FTP” on page 4-125.
